Our mission is to provide the highest level of quality product for our customers through a totally vertically integrated factory system (>68K sq ft). GAC’s value-added manufacturing services range from concept design to complex large system integration and assembly. We have robust engineering capabilities that provide real time and rapid solutions to the customer’s needs – including software, mechanical, electronic and production engineering capabilities. Our quality is maintained throughout our entire system – from incoming to 100% testing throughout the build cycle (ISO 9001:2008). Our state of the art test cells (5) offer the ability to test product and prototypes on various engines and fuels. Our engineering lab includes environmental testing, EMI and shock and vibration capabilities. We offer unique designs and the ability to custom engineer solutions and offers rapid response to challenges. GAC operates an office in China for procurement of raw material and customer specific requirements with full quality inspection capability and application engineering support.

PCB – Design, Population, Manufacturing

GAC’s quick-turn PCB capabilities execute designs with high value solutions. Volume production is achieved using the flexible work cell methodology, enabling GAC to react rapidly to your requirements. Design for manufacturability (DFM) feedback is offered to our customers, reducing the opportunity for defects and increase overall production yields.

- In-house circuit design, concept validation, PCB design and layout
- Full automation from board stacking through final oven reflow process
- Flying probe, in-circuit, and functional testing capability with advanced automated equipment
- Signature conformal coating systems and potting compounds provide unparalleled moisture & vibration resistance
- 2 wave solders (1 dedicated lead free)
- 4 SMT lines (3 lead free capable, 1 dedicated lead)
- Large selection of thru-hole and SMT components with pick-and-place machines and equipment meet any demand
- Single or double sided boards
- Capable of military grade design: MIL-STD

Founded on Innovation and Providing Solutions
Panel Building, Harnesses, & Test Equipment
GAC has the ability to manufacture custom designed panels and cables / harnesses, to customer specifications ranging from low-volume, custom assemblies to high-volume commercial products. We also offer the ability to develop custom test stands using our broad range of application experience.

- Generate customer-specific schematics & wiring diagrams
- Large selection of connectors, components, displays, power supplies, meters are on-hand and available as a single source provider
- CSA, UL, NEMA, NFPA certified enclosures available
- Specialty MIL and circular connectors available
- Custom production test stands and functional test stations
- Custom low-volume harnessing with many wire color options, jacketing, wire gauges, and in-stock connector options
- Panels, boxes of any kind including ruggedized MIL grade

Coils
GAC has full coil winding capability in-house with quick turnaround on most designs. From coil size big to small – GAC has them all. All of our coils are manufactured to stringent mechanical and electrical standards to ensure quality and consistency of each coil assembly.

- Many sizing options with typical coil wire gauges of 26 to 15 gauge in both standard and heavy build wire
- Bondable wire types available using both resistance and oven bonding processes
- Both single strand and bifilar winding processes available
- Hi-pot testing and resistance testing standard as part of offering
- Engineering team can help identify correct coil designs, DFM modifications, and bobbin designs specific to customer needs

Machining & Assembly
GAC has the capability to offer the value added service of light machining to our customers with the precision required to exceed even the most stringent requirements:

- 8 CNC machining centers
- 2 Lathes
- GD&T, Magnetics Modeling, Thermal Analysis, FEA
- CMM part verification
- Automatic pressure test stations for sealed assemblies
- Ultrasonic welding capability

Founded on Innovation and Providing Solutions